



Pocosin Lakes National Wildlife Refuge

POCOSIN LAKES NATIONAL WILDLIFE REFUGE

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Pocosin Lakes National Wildlife Refuge

ESTABLISHING AUTHORITIES. . .

- **Fish and Wildlife Act of 1956 provided basic authority, and Migratory Bird Hunting Stamp Act of 1934 and Wetlands Acquisition Act of 1964 provided funds for establishment and acquisition of Pungo NWR in 1963**
- **In 1990, additional acreage acquired by Conservation Fund and donated to FWS brings total acreage to 113,674 and name changes from Pungo NWR to Pocosin Lakes NWR**



Pocosin Lakes National Wildlife Refuge

Purposes . . .

“... to protect and enhance habitat for threatened and endangered species ...”

“... to provide nesting and feeding area for wintering waterfowl on the coastal plain ...”

“... to provide breeding habitat for the wood duck and American black duck ...”

“... to provide habitat for other migratory birds and resident game birds and animals ...”

“... to provide outdoor recreation opportunities for the visiting public ...”



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WILDLIFE SPECIES OF MANAGEMENT CONCERN

Red-cockaded woodpecker
Bachman's sparrow
Henslow's sparrow
Bobwhite quail
American woodcock
Prothonotary warbler
Swainson's warbler
Prairie warbler
Brown-headed nuthatch
Wood thrush
Black-throated green warbler
Northern harrier
Greater yellowlegs
Buff-breasted sandpiper
American black duck
Wood duck
Pintail
Snow goose
Tundra swan
American bittern
Red wolf
Black bear
Pygmy rattlesnake
Spotted turtle





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HABITAT DIVERSITY . . .

113,674 acres of pocosin and associated habitat
high pocosin/pond pine pocosin (72,360 acres)
false low pocosin (18,600 acres)
true low pocosin (840 acres)
open water (7,000 acres)
cypress/gum swamp (2,800 acres)
bottomland hardwood (1,000 acres)
white cedar forest (800 acres)
natural shoreline (50 acres)
roadsides (290 acres)
canals (180 acres)
roads (180 acres)
firebreaks (1,100 acres)
farmland (1,250 acres)
moist soil units (500 acres)
cropland (1,200 acres)
grassland (4,000 acres)





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HABITAT MANAGEMENT . . .

- **Prescribed burning/wildfire suppression**
- **Water management for waterfowl**
- **Water management for pocosin restoration**
- **Moist soil unit management for waterfowl**
- **Mechanical and chemical control of noxious weeds**
- **Reforestation of wetland tree species**
- **Cooperative farming**





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PEOPLE . . .

- Fishing
- Hunting
- Environmental education
- Environmental interpretation
- Wildlife observation
- Wildlife photography





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RESOURCE PROTECTION (including land acquisition and monitoring of permitted activities) . . .

- **Special use permits**
- **Highway and utility easements**
- **Communication/Fire Towers**
- **Natural Heritage Areas**
- **Pest plant control**
- **Pest animal control**





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LAW ENFORCEMENT ISSUES . . .

- **Extensive Hunting Program**
- **Boardwalk Use/Abuse**
- **Dumping/Littering**
- **Poaching**
- **Tree Cutting**
- **Baiting Wildlife**
- **Unauthorized Vehicle Traffic**

(Law enforcement provided by one officer shared between Pocosin Lakes and Mattamuskeet NWRs and two collateral duty officers at Pocosin Lakes NWR)



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POCOSIN LAKES NWR COMPREHENSIVE CONSERVATION PLAN



Pocosin Lakes National Wildlife Refuge

The Process to date . . .

- Preplanning** **November 2000**
- Biological Reviews** **December 1999-
December 2000**
- Public Involvement
(see handouts)** **June 2001**
- Issues, Vision, Goals** **August 2001**
- Alternative/Objective
Development** **September 2001**

REFUGE VISION

GOALS

OBJECTIVES

Strategies

Projects

Strategies

Projects

Strategies

Projects

Vision Statement

The Pocosin Lakes National Wildlife Refuge will restore and maintain natural processes and biodiversity of a functional pocosin wetland and provide habitat for threatened and endangered species. The refuge will also provide optimum wintering habitat on the Pungo Unit for migratory wintering waterfowl and breeding habitat for wood ducks in conjunction with other refuges in the National Wildlife Refuge System.

The refuge will reduce habitat fragmentation by establishing corridors to other protected areas in the central Albemarle - Pamlico Peninsula. The refuge visitor center will be a gateway to refuges in eastern North Carolina. The refuge will serve as the destination of nature-based tourism that will contribute to the economic health of rural communities. It will provide opportunities for priority public uses. The refuge staff will continue to use partnerships to accomplish goals.

GOALS

WILDLIFE POPULATIONS: Preserve, protect, and maintain healthy and viable populations of migratory birds, wildlife, fish and plants including federal and state endangered species and trust species.

HABITAT: Restore, protect and enhance pocosin wetlands and other natural habitats for optimum biodiversity. Intensively manage habitats specific to waterfowl on the Pungo Unit.

PUBLIC USE: Develop programs and facilities to provide public use opportunities including hunting, fishing, environmental education, interpretation, wildlife photography and observation.

RESOURCE PROTECTION: Protect refuge resources by limiting the adverse effects of human activities and development on refuge resources.

ADMINISTRATION: Acquire adequate funding, workforce, facilities, equipment, and infrastructure to accomplish the other refuge goals. Support local efforts to sustain economic health through nature-based tourism.

WILDLIFE ISSUES FROM SCOPING MEETINGS

- **Bear poaching for bear parts should be eliminated**
- **Bear populations too high**
- **Bears pose threat to lands adjacent the refuge**
- **Black bear poaching is prevalent (probably for bear parts)**
- **Conduct inventories to reflect current species composition**
- **Consider non-game species in management objectives**
- **Coordinate with state officials to change hunting regulations**
- **Create restricted buffer zones between refuge and private property**
- **Deer being totally annihilated by red wolves**
- **Deer populations are decreasing in the past few years**
- **Deer populations impacted by wolf predation**
- **Develop alternatives for animal damage control besides hunting**
- **Educate the public on proper defense against red wolf damage to personal property**
- **Field crop damage from bear**
- **Field crop damage from tundra swans**

WILDLIFE ISSUES FROM SCOPING MEETINGS

- **Increase law enforcement**
- **Increase Tundra swan control (potentially by increasing bag limits)**
- **Increase waterfowl bag limits**
- **Investigate the occurrence of migratory butterflies and bats**
- **Keep the Red wolf on refuge property**
- **Protect adjacent cropland**
- **Public abuse of refuge rights of way to poach on private lands**
- **Rattlesnakes are a concern**
- **Restrict public access to refuge during hunting season**
- **Share baseline data between refuges and state agencies, where appropriate**
- **Snow geese populations too high**
- **Unwanted grass seeds from Tundra swans**
- **Wolf biologists cooperate more with landowners to deal with problem wolves**

HABITAT ISSUES FROM SCOPING MEETINGS

- **Coordinate with state to improve Lake Phelps water quality**
- **Coordinate with state to reduce threat of flood to Tyrrell County**
- **Create corridors between refuges**
- **Create habitats to provide structural needs for non-game species**
- **Create more habitat types and distribute them more evenly across refuges**
- **Create pockets of heavily cropped interior areas for forage to keep wildlife off farms**
- **Develop and evaluate landscape level interrelationships**
- **Develop and install additional water control structures**
- **Develop list of species preyed on by migratory birds**
- **Establish quail habitat on refuges**
- **Evaluate controlled burns for potential quail habitat**
- **Improve fish habitat on Lake Phelps**
- **Increase hardwood planting for increased wildlife food values**
- **Manage current water control structures**
- **Plant species that attract wildlife**
- **Remove roads and ditches no longer used**
- **Restore hydrology**
- **Utilize species' life history requirements in management decisions**

HABITAT MANAGEMENT ISSUES FROM SCOPING MEETINGS

- Allow natural process to dominate**
- Coordinate with state to develop cooperative management plans**
- Develop restoration objectives that enable self-maintenance**
- Evaluate the impacts of water management on all fish species**
- Improve water management**
- Incorporate natural processes as a management alternative**
- Restore hydrology for anadromous fish**
- Review historic role of natural processes to guide management decisions**
- Work closely with state to ensure that natural processes take place**

PUBLIC USE ISSUES FROM SCOPING MEETINGS

- Add safety buffers or no-hunting zones**
- Allow horseback riding**
- Allow horseback riding on existing public access roads**
- Allow more access for wildlife viewing**
- Allow uses that are also compatible with local community objectives**
- Definitions of the big 6 public uses need to be made available**
- Educate public on effects of management practices (i.e. burns)**
- Eliminate question 9 on appropriate use policy draft: “is the refuge the only suitable location for the activity?” or change it to read: “is the refuge in a specially suited location for the activity?”**
- Engage in more partnering**
- Establish a well-maintained road north and south and one east and west**
- Improve access to view full array of habitat types on refuges**
- Increase borders**
- Increase handicapped access for wildlife observation and hunting**
- Increase law enforcement**
- Increase law enforcement presence during the hunting season**
- Keep public use decisions in the hands of the individual refuge manager**

PUBLIC USE ISSUES FROM SCOPING MEETINGS

- **Make sure comments are heard**
- **More enforcement**
- **Patrol the refuge on weekends**
- **Provide education on ecosystem functions across full array of refuge habitats**
- **Provide more education on the interrelationship of wildlife habitat and public use**
- **Provide public awareness hotlines to report abuses**
- **Refuge managers need to be allowed to work closely and partner with communities**
- **Trespass and vandalism is a big problem from refuge to private lands where poaching occurs; law enforcement is lacking**

RESOURCE PROTECTION ISSUES FROM SCOPING MEETINGS

- Acquire land from willing sellers**
- Consider corridor development**
- Create, monitor and enforce a hunter sign-in area**
- Designate wilderness areas**
- Develop a hunter safety certification**
- Develop permit system to regulate hunter activity**
- Do not designate wilderness areas**
- Enforce littering violations**
- Evaluate limitations to adjacent land use resulting from wilderness designation**
- Increase law enforcement**
- Make hunters accountable**
- Provide hunter education**
- Require hunter safety card**
- Allow trapping on refuges to control certain species and for recreation**
- Educate neighboring landowners on safe harbor programs and other programs that help avoid other conflicts**
- Land protection beyond refuge boundaries should not exist without consideration of local landowner's current land uses and public uses**
- Restrict truck tire sizes during hunting season**

WILDERNESS ISSUES FROM SCOPING MEETINGS

- **Approved uses in wildernesses need to be clearly defined for the public in advance of any designation**
- **Problems with fire will make wilderness designation difficult**
- **Designate wilderness areas**
- **Do not designate wilderness areas**



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3 Management Alternatives Derived from Public Involvement and Strategic Planning . . .

- 1. Existing conditions (status quo)**
- 2. Moderate program increases**
- 3. Optimum program increases**



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ALTERNATIVE 1: No Action – Status Quo (6.5 FTE Non-Fire and 8.5 FTE Fire)

Biological program focused on wintering waterfowl habitat, wood duck production, and moist soil area management

Public use program focused on hunting

Public use facilities developed for other uses, programs under development

Law enforcement from full time officer at Mattamuskeet NWR and collateral duty officers at Pocosin Lakes NWR



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ALTERNATIVE 2: Moderate Program Increases (21.5 FTE Non-Fire and 8.5 FTE Fire)

Biological program diversified to priority indigenous species, especially red-cockaded woodpeckers

Public use program diversified to address all priority public uses and fully utilize facilities

Habitat management focused on hydrology restoration

Law enforcement from full time officer and collateral duty officers at Pocosin Lakes NWR

Construct new shop near Columbia



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ALTERNATIVE 3: Optimum Program Increases (23.5 FTE Non-Fire, 5.0 FTE Shared Specialists, and 8.5 FTE Fire)

Biological program diversified to all species and habitats

Biological program enhanced for woodpecker, fish, and alligators

Habitat management program focused on hydrology restoration

Public use program diversified to address all priority public uses and fully utilize facilities

Public use program enhanced to provide extensive environmental education opportunities
















Law enforcement from two full time officers and collateral duty officers at Pocosin Lakes NWR

Construct new shop near Columbia



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POCOSIN LAKES LAND PROTECTION PRIORITIES

-  Palmetto Peartree Preserve - 11610
-  In-Holdings - 1656
-  New RCW PPP- 6084
-  Scuppernong River - 17169
-  Lake Phelps East - 17394
-  Frying Pan North- 4408
-  Kilkenny - 38068
-  All-Star Foods - 31787
-  Roanoke River Linkage - 53791
-  REFUGE BOUNDARIES (113936)
-  SIGNIFICANT NATURAL HERITAGE AREAS
-  WATER BODIES
-  MAJOR STREAMS AND CHANNELS
-  COUNTY BOUNDARIES
-  PRIMARY ROADS



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Activities on New Land Protected

(Analyze each combination of protection levels and program alternatives in the CCP process)

Alternative 1 Post the boundaries.

Alternative 2 Post the boundaries.

Inventory the habitat.

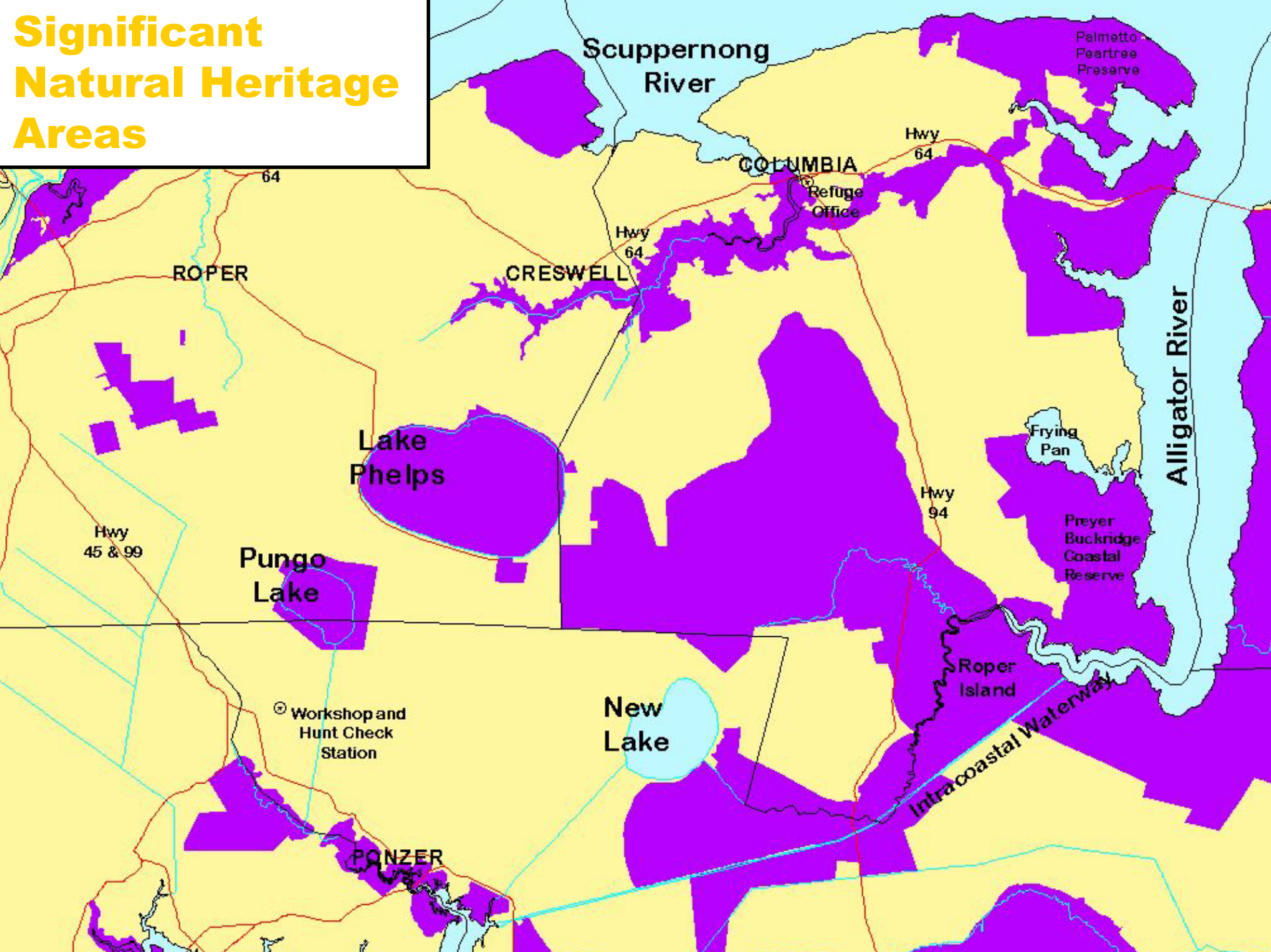
Alternative 3 Post the boundaries.

Inventory the habitat and wildlife

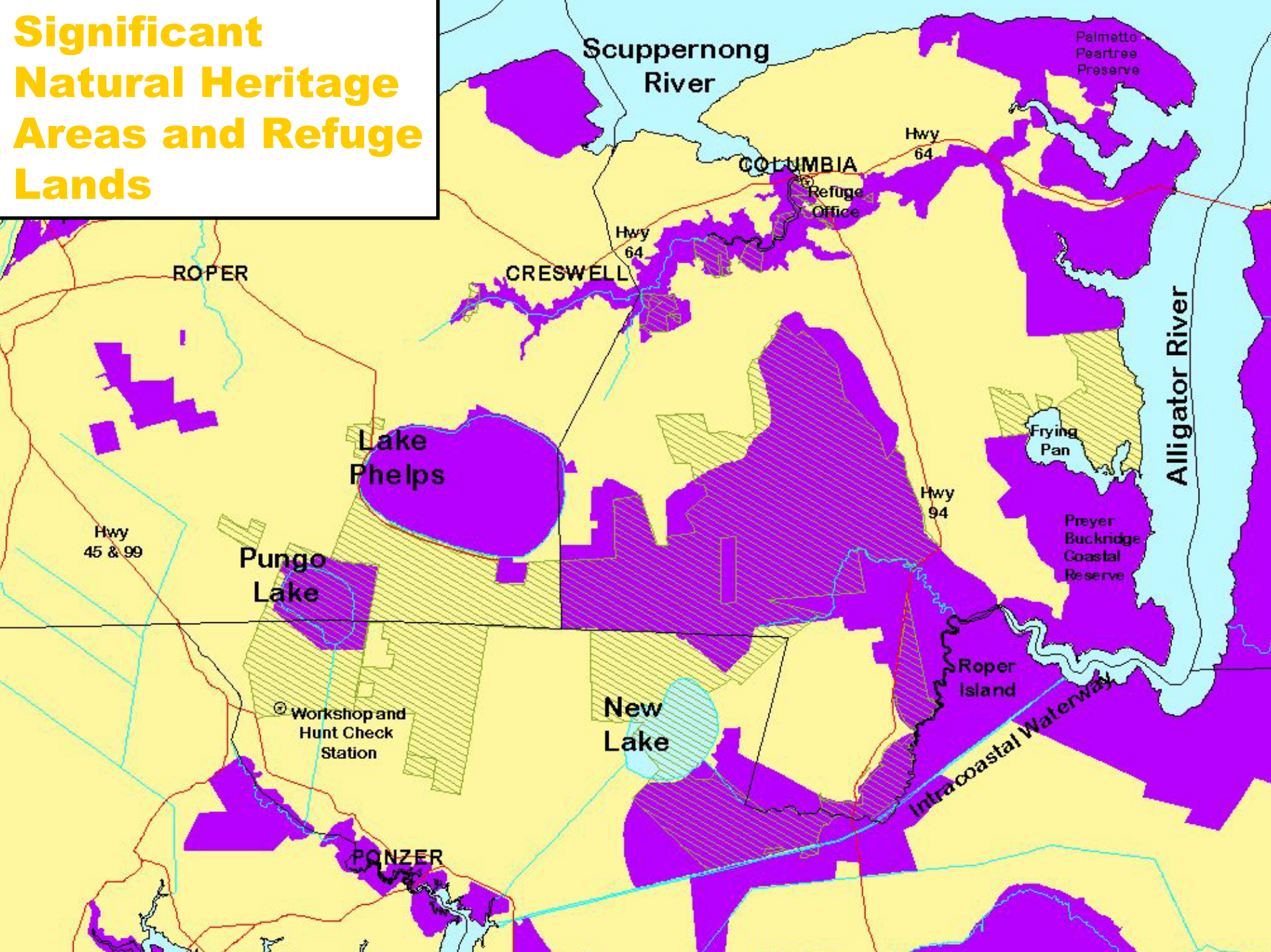
Manage the habitat and wildlife.

Beyond Level 2, revise the CCP to consider new programming, staff, and physical plant required.

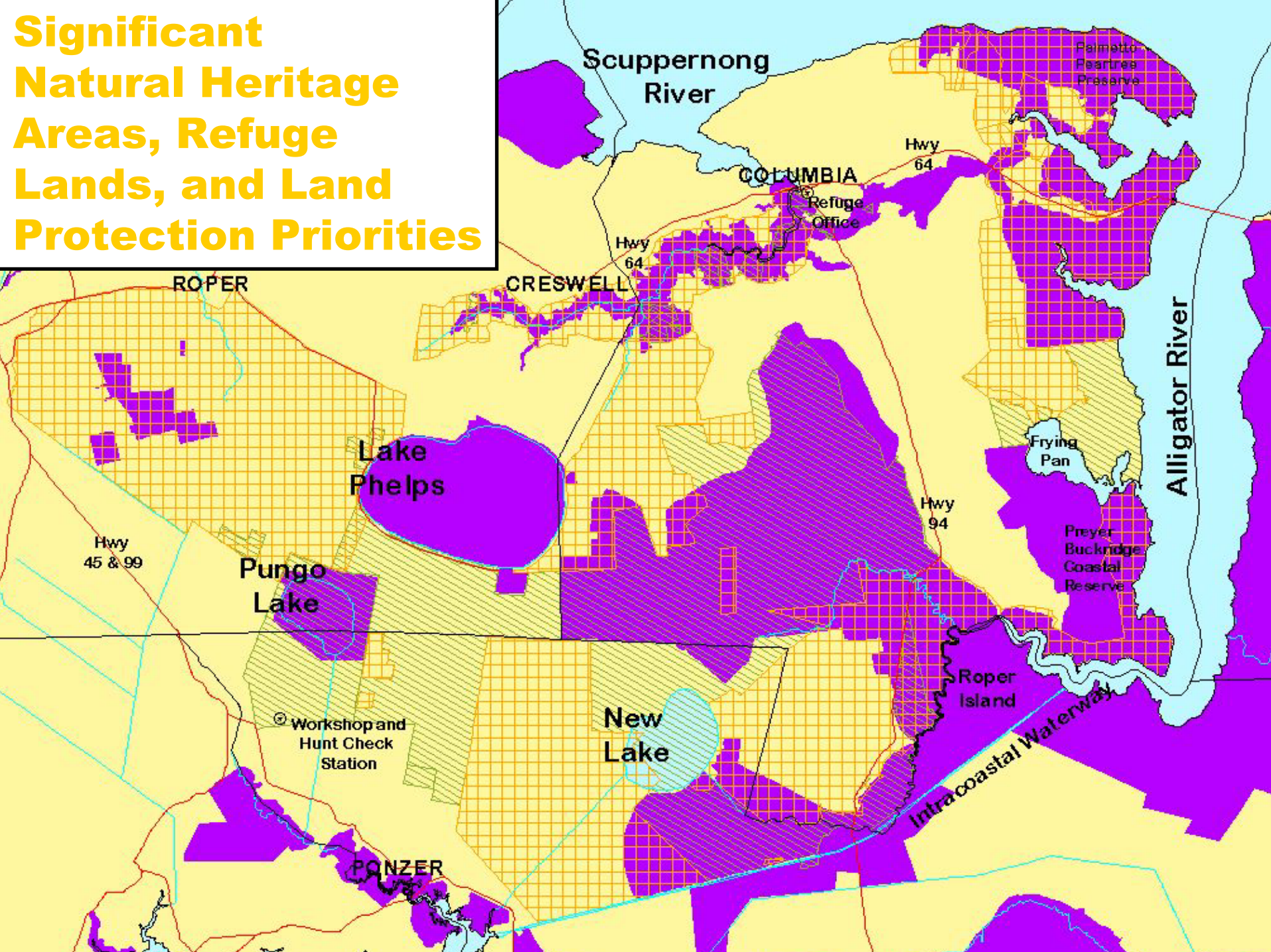
Significant Natural Heritage Areas



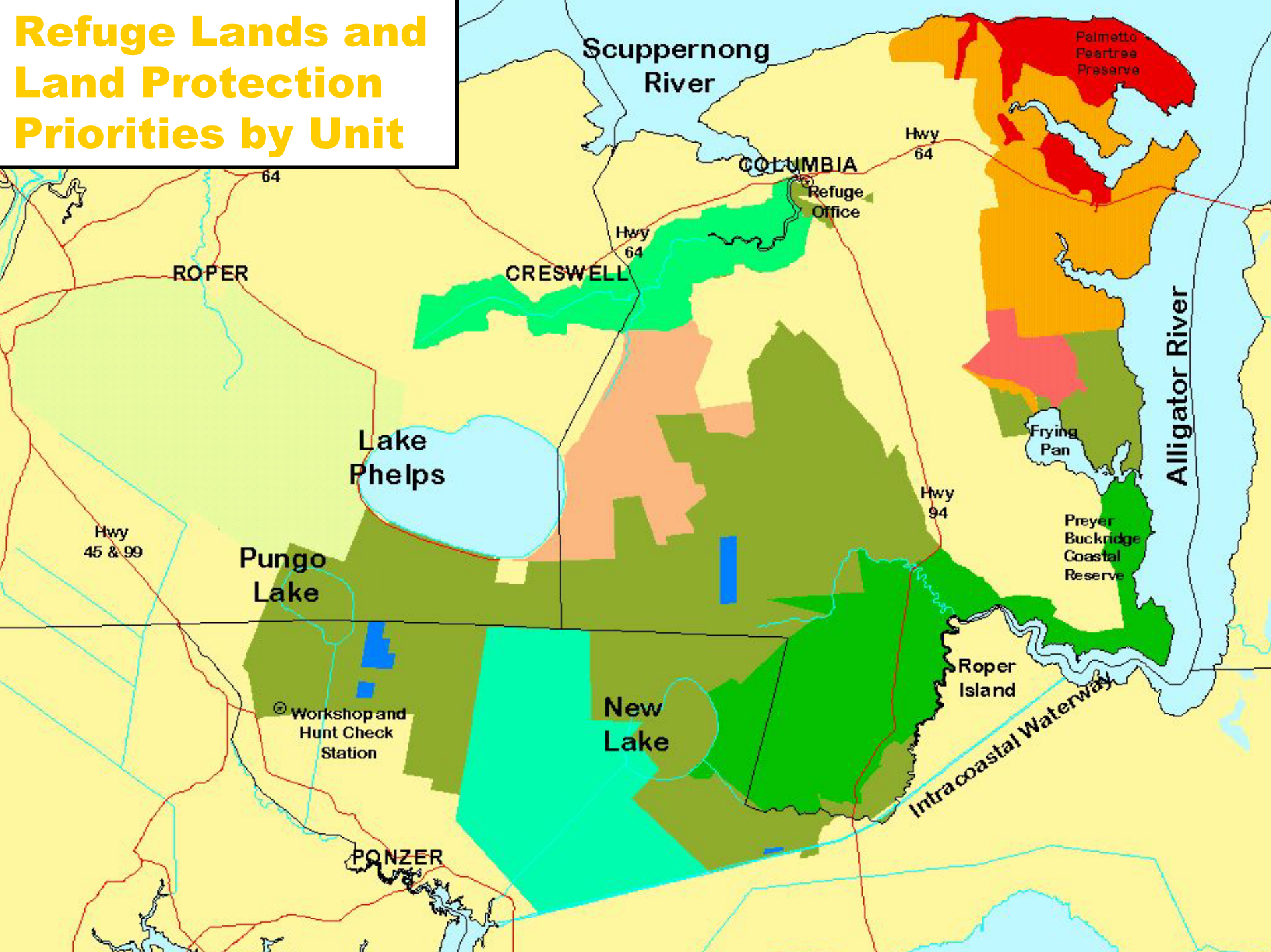
Significant Natural Heritage Areas and Refuge Lands



Significant Natural Heritage Areas, Refuge Lands, and Land Protection Priorities



Refuge Lands and Land Protection Priorities by Unit



Wilderness Study Area Alternatives:

- 1: No Wilderness
- 2: Cypress-Gum and
Tall Pocosin Area
(7,384 Acres)



- 3: Cypress-Gum and
additional Tall
Pocosin Area
(17,452 Acres)

